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EXAMINER

CHUNG, JASON J

| ART UNIT | PAPER NUMBER |
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2611

DATE MAILED: 09/24/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/517,195

Applicant(s)

YOUNG, CHARLES E.

Examiner

Jason J. Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/15/03 have been fully considered but they are not persuasive. The applicant argues that the reference of Bell is done automatically and thus the amendment of the word "subjective" makes it patentable over the prior art of record as stated on page 6, third paragraph of the applicant's response.

The examiner respectfully disagrees with this assertion. The examiner takes a broader read of the claimed subject matter than the read taken by the applicant. As disclosed in the rejection below, Bell discloses a "consensus" is reached between the **users desires** (collecting viewer reactions to an exposure of a document (display object)) and the parameters of the system (column 18, lines 22-41). Thus, there is subjectivity involved in the reference of Bell.

The applicant argues about claims 7, 17 on page 6, paragraph 5 that the word "tingeing" is not based on viewers' reactions. As previously stated, Bell discloses a "consensus" is reached between the **users desires** (collecting viewer reactions to an exposure of a document (display object)) and the parameters of the system (column 18, lines 22-41). Thus, the viewer reacts, and based on the consensus of the viewer reaction and the parameters of the system, tingeing occurs.

The applicant argues on page 7, second paragraph that Borah determines relative amount of attention and that the applicant's method collects and displays cognitive reactions and verbal reports from viewer with respect to internal processes. The examiner takes a broader read than that of the applicant. As disclosed below, Borah discloses a joystick 24 creates the areas of interest AOI for the commercial (column 9, lines 56-68 and column 10, lines 1-31); the joystick making the boxes meets the limitation on collecting viewer reactions to an exposure to the

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display object and dividing the display object into a plurality of spatial regions. The viewer uses the joystick and chooses (subjectively) the areas of interest AOI for the commercial. The applicant's invention is directed toward indicating regions of interest in an image such as taught in Borah.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the verbal reports) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant argues on page 7, bottom paragraph – page 8 second paragraph that Borah fails to disclose between the duration of a quarter second to 4 seconds and it is not obvious to modify because a quarter second to 4 seconds is generating a distribution of looking times and that screen burning is for long periods of time for a cathode ray tube. Borah suggests it would be advantageous for a duration that is not extremely long term by disclosing the scene is a finite time or duration and saying the changing of another subject (column 9, lines 45-50). Borah discloses the commercial can be played from a VCR and the user indicates areas of interest (column 10, lines 3-37). The examiner would like to point out that the television monitor for Borah is also a cathode ray tube and that screen burning is therefore applicable in the Borah reference if the user is viewing a long scene of a commercial (slow motion from VCR) or has the commercial on pause from the VCR with the area of interest AOI remaining unchanged. Thus it would be advantageous to prevent the screen burning especially when playing a commercial from a VCR.

The applicant argues the 103 rejection of Borah regarding claims 6, 7, 16, and 17 on page 8 last paragraph - page 9. The applicant states that the transparency or tingeing to provide colors to the viewers liking may be true but not relevant to the applicant's claim, thus the applicant states on the record to the fact that the transparency or tingeing to the viewers liking may be true. As previously disclosed, Borah discloses the user uses the areas of **interest** AOI using a joystick. The fact that the user is interested in the area is a reason enough to modify by transparency or tingeing to indicate the area of interest to the user. The applicant goes on to say that the "applicant's claim have to do with tingeing and transparency...or other design variations for an image".

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "the tingeing and transparency are not being used for the purpose of directly improving the underlying image but rather the purpose of conveying information... design variations for an image") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant argues on page 7, third and fourth paragraph that Tognazzini determines relative amount of attention and that the applicant's method collects and displays cognitive reactions and verbal reports from viewer with respect to internal processes and are patentable for the same reasons as in Borah. The examiner takes a broader read than that of the applicant. As disclosed by the applicant, examiner, and the inventor (Tognazzini), Tognazzini discloses the eye

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gazing of a region and magnifying the area of the gaze. The user chooses (subjectively) using his/her own actions which areas to view.

The applicant argues on page 9 with respect to claims 3 and 13 that periods ranging from a quarter second to 4 seconds are flawed for the reasons of continuous display of a document. The examiner takes a broader read than that of the applicant. The applicant states: (i) the document is constantly changing depending on where the user is viewing; (ii) the method of Tognazzini could not involve short durations because it would make the display disconcerting to the user; the claim states the exposure for the time range of the display object; (iii) Tognazzini has nothing to do with the applicant's invention. The viewer quickly skimming through each magnified region to find a specific region meets the limitation of the claim and would make the reference involve short durations and the document constantly changing and would involve recognition making it more concerting to the user because the user would not have to stare at an inapplicable region for a long period of time, but rather just skim through inapplicable regions.

Regarding the applicants arguments on page 9 with respect to claims 6, 7, 16, 17 rejection by Tognazzini, the applicant states the same comments apply to Borah. Thus the examiner rebuts the comments of the Tognazzini reference using the same rebuttals in response to the Borah reference.

The applicant argues on page 9 with respect to claims 9, 19 that Tognazzini does not disclose subjective and rather gaze tracking of motion pictures would be objective. The examiner respectfully disagrees with this assertion since the viewers choose (subjectively) using the brain where they are gazing.

In conclusion, the examiner maintains the previous grounds of rejection in consideration of the amendment.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 7, 8, 11, 12, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell (US Patent # 5,424,945).

Regarding claim 1, Bell discloses a document (display object) is analyzed and given a visual aspect in view of certain criteria and a grid is electronically “placed” over the aspect (column 7, lines 3-10); the grid is divided into a plurality of spatial regions being a matrix of cells as shown in figure 3. Bell discloses harmony of gradation can be evaluated using the grid system (column 13, lines 26-57).

Bell discloses when analyzing the document in terms of psychological effect the users desires, sometimes the users desires are different from the graphic designer. Bell discloses a “consensus” is reached between the users desires (collecting viewer reactions to an exposure of a document (display object)) and the parameters of the system (column 18, lines 22-41). Bell further discloses the user is asked questions (reads on computerized interview, which is disclosed in applicant’s specification) to determine the psychological effect of the document (column 18, lines 42-65); the “consensus” reached between the data from the computerized interview and the

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parameters of the system meets the limitation on collecting viewer reactions to an exposure of a document (display object). Bell goes on to discuss the psychological tests in column 18, lines 66-68 and all of column 19.

As previously disclosed, Bell discloses a consensus is reached between the system parameters and the desires (viewer reactions) of the user based on questions in a test to determine the psychological effects. Bell discloses the in the electronic grid case, the selected region is simply one square in the grid, and the process of evaluating the image data associated with the area within the grid square is repeated for every grid square (column 14, lines 42-45), which meets the limitation on correlating the viewer reactions with the spatial regions.

As previously disclosed, Bell discloses a consensus is reached between the system parameters and the desires (viewer reactions) of the user based on questions in a test to determine the psychological effects. Bell discloses the user uses word-processing applications software in the context of a user creating a document on a PC and then printing (displaying) out the document (display object) on a printer (column 17, lines 1-7), which meets the limitation on displaying the display object with an aspect of a display of each spatial region being a function of the viewer reactions for the region.

Regarding claim 2, Bell discloses a document is analyzed and given a visual aspect in view of certain criteria and a grid is electronically "placed" over the aspect (column 7, lines 3-10); the grid is divided into a plurality of spatial regions being a matrix of cells as shown in figure 3.

Regarding claim 7, as disclosed in claim 1 rejection, Bell discloses a consensus is reached between the system's parameters and the user's desires based on the results of a psychological

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test. Bell discloses the software for designing the document provides a range of possible psychological effects (column 14, lines 46-49). Bell discloses the gradation (tingeing) can be evaluated through means using the electronic grid system (column 13, lines 26-57). Bell discloses that certain colors represent psychological effects and the colors (tingeing) are chosen using a look up table (column 15, lines 1-47).

Regarding claim 8, as disclosed in claim 1, the display objects are documents. Bell discloses the documents are pages in a book (static images), a poster (static image), or pages in a magazine (static image) (column 4, lines 29-45).

Regarding claim 11, the limitations in claim 11 have been met in claim 1 rejections.

Regarding claim 12, the limitations in claim 12 have been met in claim 2 rejections.

Regarding claim 17, the limitations in claim 17 have been met in claim 7 rejections.

Regarding claim 18, the limitations in claim 18 have been met in claim 8 rejections.

Claims 1, 2, 4, 9, 11, 12, 14, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Borah (US Patent # 4,789,235).

Regarding claim 1, Borah discloses the scene of the television commercial is divided into areas of interest (column 9, lines 19-34), which meets the limitation on dividing the display object into a plurality of spatial regions.

Borah discloses a joystick 24 creates the areas of interest AOI for the commercial (column 9, lines 56-68 and column 10, lines 1-31); the joystick making the boxes meets the limitation on collecting viewer reactions to an exposure to the display object and dividing the display object into a plurality of spatial regions.

Borah discloses the coordinates of the boxes for a scene stay fixed as long as the eyes of the woman stay in the area of interest and the scene continues until the area of interest is no longer valid (column 9, lines 35-56); the area of interest pertaining to the eyes of the woman for a scene as long as the eyes are in the area of interest meets the limitation on correlating the viewer reactions with the spatial regions; the scene displayed with the area of interest on the eyes of the woman meets the limitation on displaying the display object with an aspect of a display of each spatial region being a function of the viewer reactions for the region.

Regarding claim 2, Borah discloses dividing the display into a matrix and each spatial region being a cell of the matrix (figure 2).

Regarding claim 4, Borah discloses the looking time of the different areas of interest and the mean amount of time employed by a sample of people (plurality of viewers) fixating each for the areas of interest in each scene (column 7, lines 38-44).

Regarding claim 9, Borah discloses the scene (display object) occur over a duration of time and the area of interest are the coordinates of the boxes as long as the eyes of the woman stay in the area of interest (column 9, lines 35-50), which reads on the display object comprising displaying images as a motion picture.

Regarding claim 11, the limitations in claim 11 have been met in claim 1 rejections.

Regarding claim 12, the limitations in claim 12 have been met in claim 2 rejections.

Regarding claim 14, the limitations in claim 14 have been met in claim 4 rejections.

Regarding claim 19, the limitations in claim 19 have been met in claim 9 rejections.

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4, 5, 8, 10, 11, 14, 15, 18, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tognazzini (US Patent # 5,731,805).

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Tognazzini.

Regarding claim 1, Tognazzini discloses the gaze position, gaze coordinates, gaze coordinates (raw), image, pointing device, and selectable control area (column 7, lines 63-67 and column 8, lines 1-25). Tognazzini discloses different article headlines with different partial text of the title articles (column 13, lines 59-67 and column 8, lines 1-3), which meets the limitation on dividing the display object into a plurality of spatial regions.

Tognazzini discloses the gaze tracker indicates the user is reading the article; the text begins expanding by a magnification factor optimal to the user (column 14, lines 3-6); the gaze tracker indicating the user beginning to read the article meets the limitation on collecting viewer reactions to an exposure to the display object;

the expanding of the text reads on correlating the viewer reactions with the spatial regions;

the final magnification optimal to the user reads on displaying the display object with an aspect of a display of each spatial region being a function of the viewer reactions for the region.

Regarding claim 4, Tognazzini discloses the advertiser can selected to be of interest to the user, which allows information provider to narrowly target advertising and articles to each user (each of **plurality of users**) (column 16, lines 29-45).

Regarding claim 5, as disclosed in claim 1 rejections, Tognazzini discloses gaze tracking, which indicates the user is reading a certain article on a page with a plurality of articles and the article of interest expands to a size optimal to the user. The original non-expanded graphics is one exposure and the expanded graphic reads on another exposure; the entire document of the articles reads on a display object and the user is being presented a plurality of exposures of the display object (original and expanded).

Regarding claim 8, as disclosed in claim 1 rejection, the final image is an image expanded to an optimal size to the user, which reads on a static image.

Regarding claim 10, as disclosed in claim 1 rejection, Tognazzini discloses presenting a plurality of articles (images) and each of the articles expand when the gaze tracker indicates the user is looking at the specific article. Tognazzini discloses the user can gaze at the article and the article will expand and when the user looks away from the article the article will reduce in size; the user can also begin reacquiring an abandoned article by bringing the gaze back to the abandoned article (column 14, lines 24-43 and column 15, lines 1-40). The original non-expanded image reads on one exposure, the expanded image reads on another exposure, and the image reduced reads on another exposure.

Regarding claim 11, the limitations in claim 11 have been met in claim 1 rejections.

Regarding claim 14, the limitations in claim 14 have been met in claim 4 rejections.

Regarding claim 15, the limitations in claim 15 have been met in claim 5 rejections.

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Regarding claim 18, the limitations in claim 18 have been met in claim 8 rejections.

Regarding claim 20, the limitations in claim 20 have been met in claim 10 rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 6, 7, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borah.

Regarding claim 3, Borah discloses the scene (display object) occur over a duration of time and the area of interest are the coordinates of the boxes as long as the eyes of the woman stay in the area of interest (column 9, lines 35-50). Borah fails to disclose the duration being $\frac{1}{4}$ to 4 seconds. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Borah to make the duration of the commercial scene (display object) between $\frac{1}{4}$ and 4 seconds to vary the scene in order to prevent screen burning.

Regarding claims 6-7, Borah fails to disclose displaying with transparency or tingeing. The examiner takes Official Notice that transparency and tingeing are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Borah to display images with transparency or tingeing in order to provide colors that are optimal to the viewers liking.

Regarding claim 13, the limitations in claim 13 have been met in claim 3 rejection.

Regarding claims 16-17, the limitations in claims 16-17 have been met in claims 6-7 rejections.

5. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognazzini in view of Bell.

Regarding claim 2, as disclosed in claim 1 rejection, Tognazzini discloses dividing the display into a plurality of articles. Tognazzini fails to disclose the articles being a matrix and each spatial region being a cell of the matrix. Bell discloses the documents are hard copy such as printed documents (column 4, lines 29-45). Bell discloses the document being divided into a grid (matrix) comprising of squares (cells) (column 7, lines 3-19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tognazzini to have the display be divided into a matrix of cells as taught by Bell in order to show coordinates of the articles on the document to the user.

Regarding claim 12, the limitations in claim 12 have been met in claim 2 rejections.

6. Claims 3, 6, 7, 9, 13, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognazzini.

Regarding claim 3, as disclosed in claim 1 rejection, Tognazzini discloses the gaze position, which is an area of interest on the screen of the user's gaze over a limited period of time. Tognazzini fails to disclose the period of time being $\frac{1}{4}$ and 4 seconds. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tognazzini to make the period of time between $\frac{1}{4}$ and 4 seconds so the user can skim through an article quickly depending on gaze.

Regarding claims 6-7, Tognazzini fails to disclose displaying with transparency or tingeing. The examiner takes Official Notice that transparency and tingeing are notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tognazzini to display images with transparency or tingeing in order to provide colors that are optimal to the viewers liking.

Regarding claim 9, Tognazzini fails to disclose gaze tracking a motion picture. The examiner takes Official Notice that gaze tracking a motion picture is notoriously well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Tognazzini to gaze track an area of a motion picture in order to expand area of interest of the image to the user.

Regarding claim 13, the limitations in claim 13 have been met in claim 3 rejection.

Regarding claims 16-17, the limitations in claims 16-17 have been met in claims 6-7 rejections.

Regarding claim 19, the limitations in claim 19 have been met in claim 9 rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason J. Chung whose telephone number is (703) 305-7362. The examiner can normally be reached on M-F, 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

JJC



ANDREW FAILE
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